The Government announced in the 2011 Budget that the Climate Change Agreements (CCAs), which were due to end in March 2013, will (subject to state aid approval), be extended to 2023. Since the start of the current CCAs in 2001 the UK climate change policy landscape has changed noticeably with, for example, the introduction of the EU Emissions Trading System (2005), the Climate Change Act (2008) and the CRC Energy Efficiency Scheme (2010). As a result, and following the recommendations of the Environmental Audit Committee (2008) and conclusions of the DECC Simplification Review (2006), the Government is looking to simplify the future CCAs to reduce business admin costs without affecting the scheme's carbon savings.

The objectives of this review of the CCA scheme are twofold: (i) simplify the structure of the CCAs and thereby make them easier to operate, and (ii) maintain the effectiveness of the agreements in cutting carbon emissions.

This IA assesses a number of simplification proposals by comparing them to the ‘Business as Usual’ (BAU) scheme, which is characterised as a continuation of CCAs in their current form up to 2023, with a last target period taking place in 2020. The IA does not assess the costs and benefits of achieving different levels of carbon mitigation. The expected emissions impact of the scheme will be determined following negotiations between industry and the Government on the level of the targets set for each sector.

This IA considers two options for the future of the CCA scheme: (i) the continuation of the current scheme and (ii) a modified scheme that incorporates administrative simplifications.

Option 2 is the preferred one as it will achieve a net reduction on admin burdens.

The IA does not consider abolishing the CCA scheme because of commitments made in the 2011 Budget. Option 2 is the preferred one as it will achieve a net reduction on admin burdens.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: 04 / 2020

Does implementation go beyond minimum EU requirements? N/A

Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.

<table>
<thead>
<tr>
<th>Micro No</th>
<th>&lt;20 Yes</th>
<th>Small Yes</th>
<th>Medium Yes</th>
<th>Large Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traded: 0</td>
<td>Non-traded: 0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What is the CO2 equivalent change in greenhouse gas emissions? (Million tonnes CO2 equivalent)

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister: ________________________________ Date: __________________________
Summary: Analysis & Evidence

Description:

FULL ECONOMIC ASSESSMENT

<table>
<thead>
<tr>
<th>Price Base Year 2009</th>
<th>PV Base Year 2011</th>
<th>Time Period Years 9</th>
<th>Net Benefit (Present Value (PV)) (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Low: 2.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High: 3.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Best Estimate: 2.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COSTS (£m)</th>
<th>Total Transition (Constant Price)</th>
<th>Average Annual (excl. Transition) (Constant Price)</th>
<th>Total Cost (Present Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0</td>
<td>0.06</td>
<td>0.5</td>
</tr>
<tr>
<td>High</td>
<td>0</td>
<td>0.06</td>
<td>0.5</td>
</tr>
<tr>
<td>Best Estimate</td>
<td>0</td>
<td>0.06</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Description and scale of key monetised costs by ‘main affected groups’

Under the current scheme, if a sector meets its target, every participant in that sector receives the Climate Change Levy discount, including any participants that have not met their targets. The Government has decided that for the future scheme all participants will be required to meet their targets on an individual basis. This is estimated to increase cost to industry by £0.3m.

Currently, there is a requirement to report energy consumption on a biennial basis. The Government has decided that there will now be a requirement to report annually. This is estimated to increase costs to industry by £0.2m.

Other key non-monetised costs by ‘main affected groups’

There may be one off costs associated with amending data collection procedures and related IT for participants and sector associations. Through removing the requirement for agreement holders to verify their emissions compliance may be reduced. While this may provide an administrative saving there could also be a social cost associated with higher emissions although these are expected to be marginal. No estimates of these costs have been made.

<table>
<thead>
<tr>
<th>BENEFITS (£m)</th>
<th>Total Transition (Constant Price)</th>
<th>Average Annual (excl. Transition) (Constant Price)</th>
<th>Total Benefit (Present Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0</td>
<td>0.35</td>
<td>2.8</td>
</tr>
<tr>
<td>High</td>
<td>0</td>
<td>0.45</td>
<td>3.5</td>
</tr>
<tr>
<td>Best Estimate</td>
<td>0</td>
<td>0.40</td>
<td>3.1</td>
</tr>
</tbody>
</table>
**Description and scale of key monetised benefits by ‘main affected groups’**

Key benefits for industry arise from: removing trading and verification of overachievement, removing the overlap with the EU ETS, aligning reporting periods with the EU ETS, and modifying the ‘90/10’ rule. For government there will be benefits from UK ETS closure and simplifying the reporting periods. Over the duration of the impact assessment (2012 to 2020) it is estimated that the total benefit arising from the proposed changes will be around £2.7m. The bulk of the savings (£1.6m) are realised by industry no longer incurring costs in trading allowances at the end of their target period (Risk Management Tools and Buyout Mechanism category below). The Government saves most in the administration costs (£0.2m) of the UK ETS when the scheme is closed. The table below provides a breakdown of the benefits and costs. This information has been collected through a series of consultations on the form and structure of CCAs and an assessment using the standard cost methodology for administrative burdens.

<table>
<thead>
<tr>
<th>NPV simplification savings (£000)</th>
<th>Government</th>
<th>Industry</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Negotiations and reviews</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Reporting Periods</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Baseline Years</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Risk Management Tools and Buyout Mechanism</td>
<td>161</td>
<td>1,579</td>
<td>1,740</td>
</tr>
<tr>
<td>Overlap with EU ETS-Double Counting Mechanism</td>
<td>52</td>
<td>214</td>
<td>266</td>
</tr>
<tr>
<td>Removing Verification</td>
<td>-</td>
<td>832</td>
<td>832</td>
</tr>
<tr>
<td>Option 2 Agreements</td>
<td>5</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Scheme Rules</td>
<td>18</td>
<td>-</td>
<td>18</td>
</tr>
<tr>
<td>Site Coverage: 70/30 Rule</td>
<td>9</td>
<td>50</td>
<td>59</td>
</tr>
</tbody>
</table>

**Total Benefits**

| All target units required to meet targets          | -          | -        | 299   |
| Annual Reporting                                   | -          | -        | 166   |

**Total Costs**

| -                                                  | 465        | -        | 465   |

**Total**

| 256                                                | 2,405      | 2,660    |

**Other key non-monetised benefits by ‘main affected groups’**

Some of the simplification options will make CCAs fairer but it is difficult to quantify this benefit. For example, the majority of respondents (79%) to previous consultations agreed that requiring all participants to meet their targets individually would improve the equity of treatment between target units and limit free riding.

**Key assumptions/sensitivities/risks**

CCA holders do not keep records of the admin cost of maintaining the Agreements, so it has been necessary to make estimates. CCAs have been in place since 2001 and DECC has collected data from a consultation exercise and has received feedback from participants; this forms the basis of much of this analysis. Many of the proposals in this document have been consulted on previously. Responses to this consultation have provided further evidence that has improved the quantification of the costs or benefits of a number of the simplification options proposed.

This IA quantifies the costs and benefits resulting from the future CCA scheme to 2020. If there was another target period ending in 2022 then a State aid extension would be required to grant the CCL discount until March 2025. Without this extension, there would be no incentive for participants to meet their 2021/2022 target.

**BUSINESS ASSESSMENT (Option 1)**

<table>
<thead>
<tr>
<th>Direct impact on business (Equivalent Annual) £m:</th>
<th>In scope of OIOO?</th>
<th>Measure qualifies as</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs: 0.06</td>
<td>Yes</td>
<td>OUT</td>
</tr>
<tr>
<td>Benefits: 0.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net: 0.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Evidence Base (for summary sheets)

Introduction

1. The aim of Climate Change Agreements (CCAs) is to mitigate the impact of the Climate Change Levy (CCL) on energy intensive industry and to deliver energy efficiency improvements broadly equivalent to the savings that would be achieved by the application of the full rate of the CCL.

2. This Final Impact Assessment follows the publication of a consultation on proposals to simplify the current CCA scheme which took place from September to October 2011. It updates the Consultation Impact Assessment based on the responses received from the consultation. It specifically assesses the effects of these proposals in the light of these responses.

3. The simplification of CCAs will deliver significant savings compared to the baseline situation of the extension of the existing scheme. These savings are estimated at £2.4m, which will be delivered over the 2013-2020 period.

4. Using the OIOO formula, with a 9 year appraisal period and a 3.5% discount rate, the equivalent annual net benefit to business (the “out”) is estimated at £305k.

5. This IA updates the Consultation IA with the responses to the consultation and provides further clarification of some issues raised by consultation respondents. The Regulatory Policy Committee also highlighted a number of issues which have been addressed as follows:

   a) “The evidence presented does not support the claimed benefits for a mandatory reporting date and this will need to be addressed”. This IA clarifies the contents of this proposal, showing that many respondents will benefit from aligning reporting requirements with the EU ETS. The majority of respondents to the consultation supported this measure.

   b) “The IA should also clarify which time period the proposal is being assessed over, as a number of different time periods are presented”. The last target period for participants will be January 2019-December 2020 granting participants the CCL discount to March 2023. Consequently, this IA quantifies the costs and benefits resulting from the new CCA scheme to 2020. This is stated more clearly in the IA.

   c) “The IA fails to show either how the £2,700 annual benefit (paragraph 49) was calculated, or the basis for the assumption of 25% high and 10% low verification levels (paragraph 53)”. This Final IA provides details of the unit costs, and the evidence base supporting cost/benefit calculations. It also incorporates updated analysis where this was provided by respondents to the consultation.

6. The methodology of this IA remains the same as in the Consultation IA. It evaluates the simplification proposals by comparing them to the ‘Business as Usual’ (BAU) scheme, which is characterised as a continuation of CCAs in their current form up to 2023¹. It is broken down into the following sections:

   - Option 1: The business as usual counterfactual – continuing the CCA scheme in its current form until 2023

¹ This IA quantifies the costs and benefits resulting from the future CCA scheme to 2020. If there was another target period ending in 2022 then a State aid extension would be required to grand the CCL discount until March 2025. Without this extension, there would be no incentive for participants to meet their 2021/2022 target.
• Option 2: Simplified CCAs Scheme
• One in One Out Consideration
• Risks and Assumptions
• Preferred Option 2
• Post Implementation Review Plan in Annex 1
• Relevant Impact Tests in Annex 2
• Further Background to the Scheme in Annex 3

7. The section dealing with the proposals for a new, simplified CCA scheme (Option 2) presents a cost-benefit analysis for each of the administrative simplification proposals considered in the consultation. The assessment of the proposals incorporates responses to the consultation. The areas that have been updated are:

• Savings based on the amalgamation of sectors
• Increasing the milestone period from 12 to 24 months
• Benefits from a common reporting period starting on 1 January

8. The net benefits of the options are estimated relative to the BAU scheme (the counterfactual in this IA). The proposals for simplification differ in their administrative costs. Differences in energy use and emissions have not been quantified because none of the proposals are expected to have a direct impact on emissions coverage or energy demand. The scheme’s carbon savings will depend on the targets that Government will negotiate and agree with industry in 2012.

9. The Government made clear in the Annual Energy Statement of July 2010\(^2\) that it would be considering the future of Climate Change Agreements (CCAs) to ensure they deliver significant improvements in energy efficiency while reducing complexity and policy overlap. Responses to Lord Marland’s letter\(^3\) on regulatory simplification have been taken into consideration as part of this review.

Background

10. Climate Change Agreements were introduced in 2001 in response to the Marshall Report on “Economic Instruments and the Business Use of Energy”. Lord Marshall drew particular attention to the need to balance the pressures on the environment, on business and on Government. The report proposed the introduction of an energy tax (CCL) aimed at delivering worthwhile improvements to energy efficiency and reductions to carbon emissions (compared to what they would have otherwise been) but recognised the potential impact such a tax could have on the international competitiveness of energy intensive users (EIUs).

11. Government subsequently introduced the CCA scheme, through which a discount to the CCL was made available to eligible industries in return for agreeing and delivering challenging energy and carbon savings. The Levy discount was set at 80% and subsequently reduced to 65% in April 2011.

12. The current Climate Change Agreements are due to expire in March 2013. However, the Government announced in the 2011 Budget that CCAs will be extended to 2023. The Autumn Statement\(^4\) (29 November 2011) announced that the Climate Change Levy discount on electricity will be increased from 65% to 90% in 2013. The Budget also confirmed that the existing 54 participating sectors will continue to be eligible for the CCA scheme and Levy

---


\(^3\) [http://www.decc.gov.uk/en/content/cms/about/our_goals/better_reg/better_reg.aspx](http://www.decc.gov.uk/en/content/cms/about/our_goals/better_reg/better_reg.aspx)

\(^4\) [http://cdn.hm-treasury.gov.uk/autumn_statement.pdf](http://cdn.hm-treasury.gov.uk/autumn_statement.pdf)
discount. This extension will provide industry with more certainty to invest in energy efficiency measures with longer payback periods.

**The rationale for consulting on CCA simplifications**

13. Since Climate Change Agreements (CCAs) were first introduced in 2001, the policy landscape has evolved significantly, resulting in a mix of legislation and policy which contribute to a complex environment within which industry and Government must operate. In particular the EU Emissions Trading System (2005), the Climate Change Act (2008) and the CRC Energy Efficiency Scheme (2010) have been introduced. As a result, and following the recommendations by the Environmental Audit Committee (2008) and conclusions of the DECC Simplification Review, the Government is looking to simplify the future CCAs to reduce administration costs while maintaining the level of carbon savings delivered by the scheme.

14. Government committed in the Annual Energy Statement in July 2010\(^5\) to consider the future of CCAs, alongside a review of the CRC Energy Efficiency Scheme, in order to ensure that we deliver significant improvements in energy efficiency with minimal complexity and policy overlap.

15. The policy objectives of the options and proposals for changes to CCAs are twofold: (i) simplify the structure of CCAs and thereby make them easier to operate and (ii) maintain the effectiveness of the agreements in cutting carbon emissions.

**Consideration of options for future CCA scheme**

16. This Impact Assessment considers two options for the future of the CCA scheme, the continuation of the current scheme and a modified scheme that incorporates administrative simplifications. The IA does not consider abolishing the CCA scheme because of requirements and commitments made in the 2011 Budget. In addition, the IA does not assess the costs and benefits of achieving different levels of carbon mitigation. Carbon savings in the scheme are determined by negotiated targets and is not within the scope of this IA.

**Option 1: The business as usual counterfactual - continuing the CCA scheme in its current form until 2023**

17. The counterfactual used in this IA assumes the continuation of CCAs to 2023 in their current form. However, this IA quantifies the costs and benefits resulting from the new CCA scheme only to 2020 as the last target period for participants will be January 2019-December 2020 granting participants the CCL discount to March 2023. This represents a ‘do nothing’ counterfactual, in which no simplification changes are made to the current scheme.

**Description of Current Scheme**

18. There are currently 54 sectors with CCAs, covering around 5,000 target units and 10,000 facilities. The 54 sectors covered by the scheme (which do not include the electricity generation sector) are responsible for emissions of about 57MtCO\(_2\) per annum. However, the majority of these emissions are in the traded sector (emissions which are covered by the EU Emissions Trading System (ETS)). Only 10MtCO\(_2\) are non-traded direct emissions.

19. CCAs have a two tier structure, with agreements between the Secretary of State and individual industry sector associations (e.g. steel, chemicals, cement, ceramics, food and drink) and agreements between the Secretary of State and individual participants.

20. Targets are negotiated between sector associations and government, but it is the responsibility of sector associations to distribute the agreed targets among their members. Targets are set to cover all energy used by the CCA target unit, including any covered by the EU Emissions Trading System (EU ETS). Double jeopardy or benefit in relation to emissions covered by both schemes is prevented through a CCA double counting mechanism (more background provided in Annex 3).

21. Eligibility for the scheme was initially based on sectors covered by part II of the Pollution Prevention and Control Regulations 2000. Subsequently, eligibility was extended to businesses in sectors where the value of energy used is 3% or more of the production value for the sector, and which have an import penetration ratio of 50% or more. This ratio is calculated for the sector as a whole to determine its exposure to international competition. Sectors where the value of energy used is 10% or more of the production value for the sector do not have to meet the import penetration test.

22. Target units have a choice of currency for their targets, which can be absolute (e.g. the total emissions from the unit) or relative (e.g. the amount of energy used per unit of production), and based on energy use or carbon emissions. The vast majority of targets are relative. This means that if production increases emissions may also increase.

23. In several sectors, and within many target units, it is not possible or practical to have one throughput unit and so a method of target setting and adjustment has been developed. This method is referred to as ‘the Novem method’ (described further in Annex 3). The application of Novem resolves the issue of establishing a common relative target for sectors or target units that have diverse products. The Novem procedure applies only where targets are relative.

24. The current scheme had five target periods (2002, 2004, 2006, 2008 and 2010). Where a sector meets its target, all target units within that sector are deemed to have met theirs (i.e. there will have been sufficient over-achievement by some operators to offset any under achievement by others). In this case, all operators would be re-certified for the CCL discount for the subsequent two years. Where a sector fails its target, eligibility for re-certification is assessed at individual target unit level. Any target unit within that sector that fails to meet its target could be de-certified.

25. Operators can meet targets either by direct action or by purchasing carbon allowances from the UK Emissions Trading Scheme (UK ETS). The UK ETS (described further in Annex 3) was the world’s first economy-wide greenhouse gas emissions trading scheme, established in April 2002 as a pilot scheme with a number of direct participants. It closed to direct participants in 2006, immediately after the introduction of the EU ETS. However, it remains open to CCA operators for trading purposes. If an operator over-achieves against its target, that over-achievement can, subject to verification, be sold through the UK ETS or be used against the target unit’s own future targets.

Current CCA Scheme Administration Costs

26. Administration costs fall on Government, participants and sector associations. Estimates of BAU administration costs have been derived from a number of sources and are presented.

6 The import penetration ratio is the total value of sector imports, divided by the total value of UK sector sales, plus the total sales value of imports, minus the total value of sector exports.
below. The admin cost to government has been estimated using data kept on past administration of CCAs, while admin cost estimates for participants and sector associations have been obtained from:

- A full public consultation on the structure of CCA which took place in March 2009. This produced estimates of aggregate costs for participants and sector associations.  
- Data provided by AEA Technology (DECC’s technical consultants for the CCA scheme) on the running of CCAs containing detailed statistics on the number of target units, size, sector structure and energy consumption.
- An estimation of unit costs associated with each of the activities in current CCAs. This estimation was based on a consultation with AEA Technology and a further consultation with some sector association representatives.
- Evidence provided in response to the recent consultation

7. These estimates combine unit cost with descriptive statistics about the size of sector associations and target units. **Table 1** below shows the results of this analysis for each main activity in the current CCA scheme. These figures represent the Net Present Value (NPV) of admin costs associated with the CCA scheme from 2012 to 2020. The cost for industry would be around £35.8m (Sector Association plus Participant Costs) and government £9.5m.

28. A large part of the administration cost is driven by the maintenance of the agreements, monitoring and reporting energy and emissions. However, many of these activities overlap with requirements under other schemes. For example, some CCA participants are covered by the Pollution Prevention and Control Regulations (IPCC). This IA does not consider monitoring and reporting cost in these cases because there is no significant additional admin cost, as these are already required under the IPCC regulations.

**Table 1 Administration costs in the BAU case (Option 1) and impact of proposals (Option 2) £(000) 2009 prices**

<table>
<thead>
<tr>
<th>CCA Scheme 54 sectors Current Scheme from 2012-2020</th>
<th>BAU Costs</th>
<th>Impacts of proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industry</strong></td>
<td><strong>35,808</strong></td>
<td><strong>-2405</strong></td>
</tr>
<tr>
<td>Target Negotiations including: All targets units required to meet targets</td>
<td><strong>294</strong></td>
<td><strong>299</strong></td>
</tr>
<tr>
<td>Setting Targets (not simplified)</td>
<td><strong>54</strong></td>
<td>-</td>
</tr>
<tr>
<td>CCA Maintenance (not simplified)</td>
<td><strong>17,783</strong></td>
<td>-</td>
</tr>
<tr>
<td>Monitoring - Data Collection Overlap with EU ETS Counting Mechanism</td>
<td><strong>6,623</strong></td>
<td><strong>-214</strong></td>
</tr>
<tr>
<td>Reporting</td>
<td><strong>8,351</strong></td>
<td>166</td>
</tr>
<tr>
<td>Annual Reporting</td>
<td>-195</td>
<td></td>
</tr>
<tr>
<td>Reporting Periods</td>
<td>-50</td>
<td></td>
</tr>
<tr>
<td>Site Coverage: 70/30 Rule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconciliation</td>
<td><strong>34,275</strong></td>
<td><strong>-1579</strong></td>
</tr>
<tr>
<td>Risk Management Tools and Buyout Mechanism</td>
<td><strong>-832</strong></td>
<td></td>
</tr>
<tr>
<td>Removing Verification</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cost to Government</strong></td>
<td><strong>9,492</strong></td>
<td><strong>-256</strong></td>
</tr>
<tr>
<td><strong>Total Admin cost and savings</strong></td>
<td><strong>45,299</strong></td>
<td><strong>-2660</strong></td>
</tr>
</tbody>
</table>

---

7. DECC consultation on form and content of new climate change agreements
8. Internal Report by AEA based on MS4 and MS5 periods. April 2011.
10. Disaggregation of costs to government are not available. Therefore, only aggregate costs and benefits to government are presented in this table.
Option 2 - Proposals for the future CCA Scheme

29. This section presents analysis of the impact of the proposed amendments on the future CCA scheme on the administration costs for industry and government. The IA does not assess the costs and benefits of achieving different levels of carbon mitigation. This will depend on target levels rather than administrative changes to the CCA scheme.

30. All proposals are grouped together in one scenario, with the costs and benefits assessed against the BAU assumption, or counterfactual of keeping Agreements as currently constituted (Option 1). Where the proposal is to make no change relative to current Agreements, there are no additional costs or benefits.

31. There have been two previous consultations about the structure of the Agreements, one in March 2009 and the other in December 2009. A major difference with the previous Impact Assessment is that the new CCA scheme will run until 2023, however, this IA quantifies the costs and benefits resulting from the new CCA scheme only to 2020 as the last target period for participants will be January 2019-December 2020 granting participants the CCL discount to March 2023.

32. The following section sets out in detail the impact on government and industry of the individual simplification measures following the 2011 consultation. These proposals constitute Government’s preferred Option 2.

2.1 Target and Milestone Periods

33. Under the current CCA scheme target units are required to meet performance targets in the second of the two year target period, referred to as the milestone year. The Government proposes that under the future CCA scheme the milestone period will be extended to 24 months. The target periods of the new scheme would start in 2013, 2015, 2017 and 2019. Government will work with industry to develop arrangements to handle structural change.

Benefits:
- This measure would ensure that performance against targets was measured continuously, and that the scheme is more environmentally robust. It will also provide reassurance that no gaming in the form of scheme participants stockpiling product before a target period so they can reduce their production during the target period, would take place. It is expected that there would be a greater degree of compliance through the ongoing requirement for monitoring of energy consumption. This benefit has not been quantified.

Costs:
- There will be additional costs associated with keeping a record of energy use to cover each year. It is estimated that this measure will affect 2,384 participants, who do not already have to do this for other reasons. The amount of time reporting energy used in the baseline has been estimated to take 15 hours of clerical time at £14.25 per hour. Based on the same modelling that was undertaken in order to set baseline costs which applies to DECC’s technical consultants estimated that this would increase costs by 10%. On this basis (10% of 2,384 target units spending 15 hours at £14.25 per hour), this measure will add £51k of administration costs every other year to the CCA scheme and a NPV of £166K.

---

11 This is made up of all energy intensive and 5-20% of IPPC Eligibility based CCA participants
34. The majority of the responses (85%) to this consultation agreed with this measure. Only 7% disagreed indicating that this would not encourage more energy efficiency. A small number of respondents reported an expectation of a significant increase in costs from this measure, although there is no clear pattern in their responses. A closer scrutiny of these responses indicate that:

1. In general, reported hourly costs are much higher than the DECC original estimate of £14.25 per hour with some estimates implying an hourly cost well above £50 per hour (much higher than one could normally expect for a non-managerial task).
2. Many respondents did not provide any context to the costs they highlighted in their responses making it difficult to use this information.
3. Some assigned costs from target negotiations and other requirements which cannot be appropriately applied to this measure.

35. Given these issues, and that the majority of respondents confirmed that costs would be low or negligible, this Impact Assessment does not update the figures from the earlier Consultation IA.

2.2 Reporting Periods

36. Under the existing CCA scheme sector associations have been able to select a starting date for the target period when they joined the scheme: 1 October, 1 November, 1 December or 1 January. However, this date is fixed thereafter. Many sectors chose a starting point before reporting requirements for the EU ETS were introduced. In the 2009/10 Climate Change Agreements’ consultations it was proposed that the target periods for all sectors would commence on 1 January in order to ensure alignment with EU ETS reporting, which takes place on a calendar year basis.

Benefits:
- This proposal would simplify data gathering, be more convenient, allow more time for reporting for some sectors and allow direct comparisons to be made between Climate Change Agreements data and other data on factors such as raw material usage which are useful to industry for more reasons rather than just reporting. As a result some sectors will have more reporting time but no sector will have less.
- A reduction in the administrative burden on those businesses that are also participants of the EU ETS will arise in terms of recording, reporting and provision of data for audit purposes. Savings are estimated to be around £60,000 every two years, which is £247.50 of time savings (1 day of 7.5 hours at £33 per hour) from the number of target units (241 units based on DECC records) who have installations covered by the EU ETS and CCAs and do not currently have a target period start date of 1 January. These figures have been estimated based on the number of target units in DECC records that participate in both schemes and the unit cost of reporting based on the IA of December 2009. No new evidence was submitted on these figures from the September 2011 consultation. The NPV is £195K.

Costs:
- There may be one off costs associated with amending data collection procedures and related IT for target units and sector associations. No estimates have been made but the cost is expected to be minimal.

37. Responses to the consultation indicated that whilst there was agreement to the timing of the target periods, and alignment with EU ETS, there was concern about the burden of completing both EU ETS and CCA reports within a short time-window. As a result of these
considerations, Government's preferred option is to align the reporting period on a calendar year basis, and to extend the reporting deadline from 1 April to 1 May.

2.3 Baseline Years

38. Under the current scheme different sectors have different baseline years ranging from 1990 to 2008 which have made it difficult to assess the impact of the scheme. Therefore, Government has decided to establish a common baseline year for the purpose of measuring the impact of the scheme. Industry responses to previous consultations held in 2009/10 demonstrated support for this proposal.

Benefits:
- A reduction in the administrative burden to Government of having to use consultants to make the necessary adjustments to each sector for the purposes of reporting performance. This is estimated as 2 days of consultants’ time at an average of £797 per day or £1,594 per year resulting in a NPV of £11K over the appraisal period.

Costs:
- There are no costs to industry associated with adjusting to a common baseline. There may be some costs to government but these are considered to be minimal.

39. In previous consultations (2009/10) which proposed 2010 as the baseline year, concerns were raised that 2010 may be atypical given the economic downturn and could present a false picture of the impact of the scheme. Given these concerns, Government considered that 2008 could be the most recent representative to use. Consequently, the September 2011 consultation proposed 2008 as the baseline year. The majority of respondents agreed with this proposal. Therefore, Government has decided to establish 2008 as the common baseline year for all sectors for the new scheme.

Impact of Sections 2.4 and 2.5 on emissions levels and the purchase of compliance

40. The impacts of the following simplification proposals need to be assessed together: applying a need for target units to meet their targets; excluding EU ETS emissions from CCA coverage and a move to a buy-out mechanism (discussed in the subsequent sections). These are all likely to change the behaviour of target units in how they negotiate their targets and the amount of abatement effort that is likely.

41. Making each target unit comply (as opposed to at sector level) will make the industry negotiators less likely to accept challenging targets because the cost of compliance cannot be spread between organisations within a sector, as has been done in the past. Therefore the number of units failing to meet their targets on site through energy efficiency or carbon reduction measures is likely to be lower, assuming that the buy-out price will be higher than the historic UK-ETS price. In the past, the cost of complying with the targets for those sectors that had missed them was very small. Under the UK ETS system the costs of buying at the UK ETS allowance price has been low (fluctuating between 50 pence to £4 per tonne of CO₂ during the current scheme). The UK ETS prices also suggest that the overall envelope of the targets was not particularly tight.

---

13 Second consultation on the form and content of Climate Change Agreements, December 2009
14 Second consultation on the form and content of Climate Change Agreements, December 2009
42. Removing the overlap between CCAs and the EU ETS will reduce the size and liquidity of the UK ETS market to a point where price volatility would likely be high, creating a price risk to participants. This would be likely to have a further impact on the way in which targets are negotiated. On the one hand it reduces the likelihood of achieving a challenging target because the expected price of non-compliance may be more costly. On the other hand, switching to a buy-out mechanism with a pre-determined price would remove the volatility of the buy-out price and would be likely to lead to a greater willingness to accept challenging targets from sector units.

43. It is unclear whether emissions and the incidence of non-compliance will be higher or lower after these administrative changes have taken place. Industry will take the changes into account when negotiating the new CCA scheme targets. Given that it is unclear at this stage whether there will be a significant effect, in this IA no impacts on emissions or the cost of purchasing compliance have been quantified.

2.4 All target units required to meet targets, regardless of sector performance

44. Currently, targets are set at the sector level and sector associations are responsible for allocating the target to their members. When performance is assessed in a target period, if a sector as a whole meets its target, all target units within that sector are deemed to have met their targets. This is irrespective of the fact that some target units may not have met their targets. Where a sector does not meet its target, target units within that sector that have not met their targets risk loss of Levy discount. This approach was criticised by the Environmental Audit Committee on both economic grounds (value for money for the tax payer) and on equity grounds (variable treatment between target units).

Benefits:
- This will promote equity of treatment between target units and prevent free riding.

Costs
- Given the need for each participant to meet their targets, there is likely to be a greater need for sectors to conduct target negotiations using a bottom-up approach, rather than top down. If target units are required to meet targets individually it is likely that all sectors will use a bottom-up approach. The current distribution is 30 sectors who negotiate using a bottom-up approach and 24 sectors in a top-down way. So this proposal will increase the cost of negotiating for 24 sectors (i.e. 44% of the total 54 sectors). This is based on the cost of setting targets calculated by technical consultants in the desk based research exercise (see paragraph 26) that established unit costs for negotiating targets at £4,595 for sectors that follow a top down approach to negotiate and £11,487 for sectors that follow a bottom up approach. For the 24 sectors moving to the bottom up approach will result in an additional cost of £6,892 per sector or £165.4k for all 24 sectors. The NPV for the whole period of appraisal is £299K.

45. 79 per cent of respondents to the December 2009 consultation\textsuperscript{16} (No new evidence was submitted on these figures from the September 2011 consultation) agreed that all target units should be required to meet their targets. Therefore, on fairness grounds, for the future scheme the Government has decided that all target units should be required to meet their targets on an individual basis.

2.5 Risk Management Tools and buy-out mechanism

46. There are four risk management tools available to target units under the current scheme. These include:

\textsuperscript{16} Second Consultation on the Form and Content of New Climate Change Agreements, December 2009
• Carbon Trading – Participants are able to purchase carbon allowances via the UK Emissions Trading Registry (more details on how the UK ETR operates can be found in Annex 3).

• Fuel Supply Disruption – Participants are able to appeal against their targets being tightened in cases of disrupted power supply.

• Relevant Constraints – Participants are able to apply for their targets to be amended in cases where legislative changes resulted in an increase of energy use or carbon emissions.

• Banking of Overachievement - Participants can currently bank any overachievement of targets. This overachievement can be used to meet future targets (when there is a shortfall) or traded with other participants.

47. Under the new scheme Fuel Supply Disruption will be retained as a risk management tool. It is unlikely that any significant legislative changes will take place between setting targets in 2012 and the target review in 2016. The target review in 2016 will provide an opportunity to take into account any changes to legislation which could impact on target achievement. In place of carbon trading via the UK ETR, Government proposed (September 2011 consultation) to introduce a buy-out mechanism and retain the banking of overachievement but only for meeting any future target shortfalls of the target unit itself. For the current scheme, the UK ETR will close and all allowances and any banked over achievement will be cancelled as indicated to all participants in the run up to the 2010 Reconciliation and in the 2009/10 consultations.

48. The buy-out mechanism would involve the payment of a fee to Government for each tonne of carbon dioxide a target unit had underachieved against its target. This would provide a simplified approach, as it would neither involve opening and running UK ETR accounts; nor would there be the complications and costs associated with trying to buy small volumes of carbon allowances as can happen at present. This mechanism would therefore be easier for industry and Government to administer than the current approach.

**Benefits:**
- Abolition of the UK ETS reduces costs for Government. This is estimated to be around £20k\(^{17}\) per annum from not running this scheme and an additional £2.7K per year of DECC’s staff time spent on using the registry during the reporting period\(^{18}\) (Based on 20 days of work from different staff grades at an average cost per day of £136 per day). The NPV for the whole period is £161K.

- Participants will save the administrative cost of buying, selling and surrendering allowances every other year which has been estimated at £484k overall for all participants at each trading period. This estimate is based on the average management cost per hour (£27.35), the number of management hours required (4) and the number of trading units (4,422). The NPV over the appraisal period is £1.579 million.

**Costs:**
- There are no increased administration costs associated with this proposal.

**Distributional effects:**
- Instead of trading, which transfers resources between scheme participants the buy-out price (if the mechanism is used) will lead to a transfer of resources from industry to Government.

49. The majority of responses to the September 2011 consultation agreed that the buy-out mechanism provides a simplified approach compared to the UK ETS but some expressed concerns that it could significantly increase costs for companies that fail to meet targets if the

---

\(^{17}\) This figure is the cost of the IT contract to run and maintain the registry

\(^{18}\) There are four years during the appraisal period in which this occurs.
price is set too high. Respondents also emphasised the need for a predictable buy-out price. Government will therefore fix the buy-out price at the start for the scheme for the first target period and then review the price at the time of target reviews.

50. Government has not quantified the purchase of compliance through the buy-out mechanism as this is expected be internalised in target negotiations.

### 2.6 Overlap with EU ETS—Double Counting Mechanism

51. A double counting mechanism (further background provided in Annex 3) is currently applied where emissions at a target unit are covered by both a CCA and the EU ETS. This mechanism was introduced because over-achievement could result in the generation of surplus allowances under both schemes in respect of the same emissions reductions. Conversely, under-achievement could result in a requirement to purchase allowances under both schemes. Within the area of overlap, over-achievement would therefore result in a double benefit, while under-achievement would result in a double penalty.

52. This mechanism is complex and administratively burdensome, and industry have called for it to be replaced by splitting CCA targets, provided it does not result in any loss of Levy discount on the emissions covered by the EU ETS. The Government has therefore decided that CCA targets will only cover non-EU ETS emissions, but target units will be eligible for the Levy discount on all CCA-eligible energy use.

**Benefits:**
- This proposal removes the need to use the double-counting mechanism which is complex and burdensome for target units, sector associations, and Government. Savings for Government from reduced admin costs are expected to have an NPV of around £52k (the administration cost of 20 days of consultancy time at £797 per day resulting in a total cost of £15,940 every other year). For industry the unit cost associated with this mechanism was estimated during the 2009/10 round of consultations to be £247.5 per target unit and £213.5 per sector association. This means savings of £59,648 for the 241 target units and £5,978 for the 28 sector associations, delivering total savings of £65,626 every other year. The NPV over the appraisal period is £214k.
- Clear separation between EU ETS obligation and CCA target should incentivise efficient mitigation under each mechanism. This benefit has not been valued.

**Costs**
- There are no costs associated with this proposal.

### 2.7 Setting a relative target across diverse products (NOVEM procedure)

53. The Novem procedure (further explained in Annex 3) was adopted in order to set targets for sectors and target units for which it is difficult to establish a common throughput measure owing to the production of a variety of products (e.g. a company that manufactures paint by the litre and coated products by the square metre.) Under the current scheme sectors and target units can choose whether or not to apply the Novem method.

54. 91 per cent of respondents to the previous consultation19 agreed with the proposal that the Novem methodology should continue to be applied, but in an obligatory way, for relevant sectors and target units, irrespective of whether the result is advantageous or disadvantageous to the sector or target unit concerned. The Government has decided that

---

19 Second Consultation on the Form and Content of New Climate Change Agreements, December 2009
the Novem procedure will be compulsory for calculating relative targets where there is a
diverse product mix.

**Benefits:**
- This proposal will reduce the administrative burden on industry and government resulting
  from new target units joining the CCA scheme. This is because it will avoid the
development of new bespoke methodologies to handle diverse product streams. This
benefit has not been valued because there is insufficient information about alternative
methodologies.

**Costs:**
- There will be one-off costs to scheme participants that are currently using bespoke
methodologies and have to switch to using NOVEM. This cost has not been valued
because there is insufficient information about alternative methodologies.

2.8 Types of Agreements

55. There are currently two different types of agreement in existence for CCAs. For sectors with
“Option 2” agreements, the underlying agreement is between the target unit and the
Secretary of State. However, under “Option 3” agreements, the underlying agreement is
between the target unit and the sector association, approved by the Secretary of State. The
terms of the agreements are in all other respects the same. The Government has decided to
discontinue ‘Option 3 agreements’ and require that all agreements with CCA target units are
made directly with the Secretary of State, instead of with sector associations.

**Benefit:**
- More consistency and transparency of the agreements in structure and operation.
- Reduced administration burden to DECC in checking data. This is estimated to be
around £1,600 every other year, which is two days of a consultant’s time (at £797 per
day). The NPV is £5K.

**Costs:**
- The proposal is not expected to increase costs for either Government or business.

2.9 Sectors’ Amalgamation Impact on Target Negotiations and Reviews

56. Target reviews provide an opportunity to ensure that targets continue to reflect the full
potential for energy efficiency improvements or carbon savings. Under the current CCA
scheme, sector targets were reviewed in 2004 and 2008 in order to ensure that targets
remained challenging. As the new scheme will run from 2013 to 2023, target reviews will be
needed to ensure that targets remain fair but challenging during the lifetime of the scheme.
For the future scheme the Government proposes that a full target review will take place in
2016.

57. There are currently 54 sectors in CCAs for which targets must be negotiated. This process
can be administratively burdensome for both Government and sectors. The Government
therefore proposed to amalgamate some sectors for negotiation purposes and invited
suggestions for potential sector groupings from consultation respondents. This proposal
would not affect the number of target units covered by the scheme, but could reduce the
number of sector targets that need to be negotiated by Government and industry.

**Benefits:**
- The amalgamation of sectors had been assumed to reduce cost because fewer sectors
would be required to negotiate targets. However, only 9% of respondents supported this
measure with most respondents highlighting a large number of issues that were not
previously considered by DECC. For instance, as an amalgamated group, the sub-
sectors would first have to reach agreement before negotiating with DECC resulting in a
more complex and time consuming process. In addition, the variation of technologies and
abatement technologies will make it difficult to produce targets for amalgamated sectors.

**Costs:**
- The proposal is not expected to increase costs for either Government or business.

58. As a result of responses to this consultation, Government has decided to amalgamate
sectors only in a few cases which cover a number of very similar activities. These are
predominantly in the agriculture and farming sectors. Consequently, costs and benefits of
this revised proposal have been considered to be negligible and have not been quantified.

### 2.10 Penalties

59. Under the current scheme the only sanction against non-compliance\textsuperscript{20} is to decertify or
terminate an Agreement. This normally means that the target unit concerned will not be able
to claim the Levy discount until the next target period. For the future scheme it is proposed
to introduce a penalty system to provide for a more proportionate, but persuasive way of
handling the more minor cases of non-compliance where scheme participants wish to correct
their infringement. These penalties are different to the buy-out mechanism discussed earlier.
They will cover things such as: late payment of the buy-out fee in relation to under
achievement against targets, late notification to the Secretary of State of ineligibility, failure
to supply by the set deadline any information requested by the Secretary of State,
inadequate record keeping and non-compliance with audits

**Benefits:**
- Participants would not face automatic removal from the scheme, and hence loss of the
  Levy discount.
- A more proportionate response for the more minor cases of non-compliance. This benefit
  has not been quantified.
- These benefits has not been quantified because there is no information on the frequency
  and number of participants that could use this mechanism in the future.

**Costs:**
- There are already costs associated with managing non-compliance under the current
  scheme. Any additional costs associated with administering the penalty scheme are
  judged to be marginal. Consequently, no additional costs have been quantified.

**Distributional Effects:**
- There will be some change in the transfers from business to Government, since there will
  be different financial penalties to be paid. These will be dependent on the nature of the
  penalty system, which will form part of an informal consultation with participants in
  January 2012.

60. The majority of respondents support the introduction of penalties and Government has
decided to implement this proposal.

\textsuperscript{20} Non-compliance includes: late submission of reporting data, failure of notification in a change of a participant's
eligibility, failure of notification from participants’ site coverage and misreporting of data submitted to assess
performance against targets.
2.11 Scheme Rules

61. Under the current Agreements, each umbrella and underlying agreements contain substantial details on the mechanics of the agreements. Any changes to the scheme therefore need to be reflected in changes to every agreement, requiring the approval of all target units (around 5,000). Consequently, making changes to the scheme is administratively burdensome and makes the agreements inflexible with potential improvements, to the benefit of industry and Government not being pursued. The result has been that, in the lifetime of the current agreements, only one change has been made (CHP inputs and outputs algorithm). In order to simplify the operation of the scheme, it is proposed that under the new scheme, the Secretary of State will be able to vary the terms of the agreements by secondary legislation.

**Benefits:**
- Reduced administrative costs to Government and admin burdens on sector associations, are estimated to be around £2,700 per annum, which is as a result of the time saved in agreeing and amending each agreement. This is equal to the benefit from saving Government 20 days of staff time in sending notifications (based on DECC Finance Management records). The NPV over the appraisal period is £18K. The Government will still consult before making amendments via legislation.

**Costs:**
- It is expected that the costs of implementing this change will be minimal. This cost has not been quantified.

62. Government has decided to pursue this proposal since there was a unanimous support for it during the 2009/10 round of consultations.

2.12 Site Coverage: Introduction of 70/30 rule

63. The Government proposes to keep the 90/10 threshold rule\(^{21}\) (further explained in Annex 3) but to reduce the threshold from 90% to 70%. It is expected that more energy will qualify for CCL discount as a result of this change but the impact is expected to be small. The change should also increase the opportunity for the installation of energy efficiency measures, but the impact is again expected to be small.

64. This change is not expected to have any material impact on costs for either industry or government. There will be marginal benefits to industry in extending the amount of energy to which the Levy discount will apply and in a reduced need to sub-meter.

**Benefits:**
- There will be savings to industry resulting from new entrants not being required to purchase sub-meters. This is assumed to be 300\(^{22}\) new entrants, with a cost saving of £750\(^{23}\) per meter. Annual maintenance savings of 5%\(^{24}\) of the capital cost of the meters have also been assumed for those new entrants who no longer have to acquire a meter. This delivers overall NPV savings of £50k over the appraisal period.

---

21 The rule provides that where the energy use of the energy intensive installation is equal to 90% or more of the total energy use of the site, the whole site is deemed to be an eligible facility.
22 This is based on some informal discussions with the CCA sectors.
23 The electricity sub-meters start at £500 and gas sub-meters start at £1,000 (installed). This is based on DECC and AEA knowledge. Therefore, a mean value of £750 has been used.
24 CCA Stakeholders and Tasks. Analysis of admin cost of CCAs by SKM Enviros for the Food and Drink Federation. Internal Report, April 2011.
There are reduced costs for Government in not having to process as many eligibility assessments, saving 10 days of staff time from the CCA team annually. The NPV is £9K.

**Costs:**
- There will be some additional compliance costs resulting from the additional coverage of energy/ emissions. These are considered to be minimal and have not been quantified.

Government has decided to pursue this proposal since there was a unanimous support for it during the 2009/10 round of consultations.

### 2.13 Removing verification

66. Under the current scheme, agreement holders that over-achieve against their targets ‘earn’ carbon allowances under the UK Emissions Trading Scheme (UK ETS). However, before these agreement holders can trade their allowances or retire them to meet targets, the allowances have to be verified by a third party.

67. Verification is a requirement under the current scheme for two main reasons: UK ETS is a fully fledged trading scheme; and there was an obligation placed on the UK for verification under State aid approval. With the closure of the UK ETR, Government proposes removing the requirement for third party verification of over-achievement, subject to normal audit procedures. It is estimated that this would have a net present value of £1.2m in the high scenario and £476k in the low. Participants will still be subject to the normal audit arrangements, which will not change as a result of these proposals.

**Benefits**
- Reduction in the cost of gaining verification for industry.
- An assessment of the verification costs has been based on the number of target units who over achieved in the last performance assessment against targets (2010), the latest period where there is data. The frequency with which verification takes place depends on the number of ring-fenced allowances, which has varied in the past from 2,150 in 2002 to 884 in 2010. The number of verifications has been estimated using data from the UK Emissions Trading Registry (UK ETR). The cost of verification is £352K assuming, a) 884 target units ring-fencing their allowances per period; b) a likelihood of having had to verify of 17.5% (25% and 10% in scenarios high and low, respectively) and c) having a high or low of verification cost (25% have a £5k cost, 75% a £1.5k cost). The NPV over the appraisal period is £832K.

**Costs**
- It is not expected that there will be any significant additional cost to Government or industry, however any resulting decrease in data accuracy could have a social cost. This has not been quantified.

68. There were few consultation responses regarding verification but all confirmed that removing verification would generate large admin savings. Government has therefore decided to remove verification.

**Summary of Preferred Option 2 Savings**

69. Table 2 below summarises all the savings and costs from measures set out in the this IA. There are a number of proposals where monetary estimates have not been possible but responses from previous consultations show that they would improve the operation of the current scheme. These include: reducing uncertainty about emissions and targets;

---

25 The high scenario is based on a higher proportion of target units that have verified their overachievement in the past which is equal to 20%. The low scenario is based on 10% of target units which corresponds to the lowest level of verification.
improving the clarity of the Agreements and making sure that each participant makes a fair contribution to achieving sector targets. See Annex 4 for details of the profile of savings across the appraisal period.

70. Estimates in Table 2 differ from previous figures contained in the 2009 Consultation IAs for two main reasons. There is a substantial reduction in the admin costs because trading will be replaced by a simplified buy-out mechanism and costly verification will not be needed under the new scheme.

Table 2 Summary of simplification measures £(000) 2009 prices

<table>
<thead>
<tr>
<th>NPV simplification savings (£000)</th>
<th>Central Scenario</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Government</td>
<td>Industry</td>
</tr>
<tr>
<td>Target Negotiations and reviews</td>
<td>-</td>
<td>195</td>
</tr>
<tr>
<td>Reporting Periods</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Baseline Years</td>
<td>161</td>
<td>1,579</td>
</tr>
<tr>
<td>Risk Management Tools and Buyout Mechanism</td>
<td>52</td>
<td>214</td>
</tr>
<tr>
<td>Removing Verification</td>
<td>-</td>
<td>832</td>
</tr>
<tr>
<td>Option 2 Agreements</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Scheme Rules</td>
<td>18</td>
<td>-</td>
</tr>
<tr>
<td>Site Coverage: 70/30 Rule</td>
<td>9</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total Benefits</strong></td>
<td><strong>256</strong></td>
<td><strong>2,870</strong></td>
</tr>
</tbody>
</table>

All target units required to meet targets: - 299 - 299

Annual Reporting: - 166 - 166

**Total Costs**  - 465 - 465

**Total** 256 2,405 2,660

**One-in, one-out (OIOO)**

71. The simplification of CCAs will deliver significant savings compared to the baseline situation of the extension of the existing scheme. These savings are estimated at £2.4m, which will be delivered over the 2013-2020 period.

72. Using the OIOO formula, with a 9 year appraisal period and a 3.5% discount rate, the equivalent annual net benefit to business (the “out”) is estimated at £305k in 2009 prices.

**Risk and Assumptions**

73. A number of risks and uncertainties have been identified in relation to the costs and benefits associated with the simplification proposals outlined under Option 2 above.

74. This IA does not quantify the impact on emissions changes as it focuses on simplification proposals only. In some of the proposals, such as the requirement for all target units to meet their targets, there could be an increase incentive to meet targets by individual participants. However this will be taken into consideration when target negotiations between industry and the Government take place.

75. There were some uncertainties about how the scheme currently operates and of the sectors which currently participate in the scheme. In particular, estimates of unit cost of different administrative tasks are based on desk base research and no audit of cost has taken place. Further research was ruled out as it would create extra costs on participants which would be disproportionate compared to the administrative cost that is trying to reduce.
In order to reduce this uncertainty, the final IA relies on responses to the consultation which asked a number of questions seeking further evidence in these areas. In some instances the responses to the consultation have helped DECC to improve its assessment of the impacts of its proposals. In other instances, information provided by respondents has not been reliably significant to change DECC’s proposals.

Overall, participants have welcomed most of these proposals and although some of the impacts are hard to quantify, it is not anticipated that the above uncertainties will have a significant impact on the estimated costs and benefits associated with the simplification proposals.

Summary of preferred option

CCAs have been in place since 2001 and there has been a number of changes in the policy landscape and the wider context. These proposals provide an opportunity to reduce the complexity of the agreements with net benefits to government and participants.

Option 2, “Proposals for the future CCA scheme”, is the preferred option because it reduces admin cost on businesses and Government. It is not expected to affect the scheme’s carbon savings and does not affect any of the main objectives of the scheme.

Although each simplification option has been analysed individually, they have been presented as a package. For most of these options, this is a sensible approach because there are strong interlinkages between these proposals. For example, the proposals that affect targets are strongly linked to changes to the baseline and reporting requirements. Therefore, all these proposals have been grouped together and presented as a single simplification option.
### Annexes

Annex 1 should be used to set out the Post Implementation Review Plan as detailed below. Further annexes may be added where the Specific Impact Tests yield information relevant to an overall understanding of policy options.

## Annex 1: Post Implementation Review (PIR) Plan

A PIR should be undertaken, usually three to five years after implementation of the policy, but exceptionally a longer period may be more appropriate. If the policy is subject to a sunset clause, the review should be carried out sufficiently early that any renewal or amendment to legislation can be enacted before the expiry date. A PIR should examine the extent to which the implemented regulations have achieved their objectives, assess their costs and benefits and identify whether they are having any unintended consequences. Please set out the PIR Plan as detailed below. If there is no plan to do a PIR please provide reasons below.

### Basis of the review:

[The basis of the review could be statutory (forming part of the legislation), i.e. a sunset clause or a duty to review, or there could be a political commitment to review (PIR)];

The new CCAs policy mechanism will not undergo a review until around 2020. However, there will be a target review in 2016 to ensure that the targets are challenging and to maximise any emissions savings. Also the participating sectors' performance against their targets will be measured biennially and a report will be written and published by the administrator of the scheme.

### Review objective:

[Is it intended as a proportionate check that regulation is operating as expected to tackle the problem of concern?; or as a wider exploration of the policy approach taken?; or as a link from policy objective to outcome?]

Please see response above

### Review approach and rationale:

[e.g. describe here the review approach (in-depth evaluation, scope review of monitoring data, scan of stakeholder views, etc.) and the rationale that made choosing such an approach]

To be determined closer to 2020

### Baseline:

[The current (baseline) position against which the change introduced by the legislation can be measured]

The baseline year against which sectors' performance will be assessed is 2008. The aforementioned published report will show the savings delivered by the scheme against this baseline.

### Success criteria:

[Criteria showing achievement of the policy objectives as set out in the final impact assessment; criteria for modifying or replacing the policy if it does not achieve its objectives]

To be determined closer to 2020

### Monitoring information arrangements:

[Provide further details of the planned/existing arrangements in place that will allow a systematic collection systematic collection of monitoring information for future policy review]

It is the sectors' responsibility to monitor and report their performance data against their targets during the target period. This will be assessed by Government every two years. The methodology for sectors to follow when reporting performance will be embodied in the CCAs Guidance Documents which will be found on our web pages. It will be very similar to the way that is currently operating.

### Reasons for not planning a review:

[If there is no plan to do a PIR please provide reasons here]

N/A
Annex 2: Impact Tests

1. Equality Impact Assessment for Climate Change Agreements (CCAs)

81. This policy has been screened in line with the Public Sector Equality Duty, considering the equality impacts on the protected characteristics of: age; disability; gender reassignment; marriage and civil partnerships; pregnancy and maternity; race; religion or belief; sex; and sexual orientation. The policy has been assessed using the specific screening questions set out in the EHRC guidance on equality impact assessments:

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the policy affect service users, employers or the wider community?</td>
<td>No, the policy is designed to provide an 80% discount (65% from 1 April 2011) on the Climate Change Levy (CCL) in return for a commitment from energy intensive sectors to achieve energy efficiency improvement targets agreed with Government. They are intended to mitigate the impact of the Climate Change Levy on the competitive position of energy intensive industry while maintaining the environmental benefits of the full Levy.</td>
</tr>
<tr>
<td>It is a major policy, with a significant effect on how functions are delivered?</td>
<td>The policy will not affect the delivery of functions.</td>
</tr>
<tr>
<td>Will it have a significant effect on how organisations operate?</td>
<td>No. The aim of the policy is to mitigate the impact of the Climate Change Levy on the competitive position of energy intensive industry while maintaining the environmental benefits of the full Levy.</td>
</tr>
<tr>
<td>Does it involve a significant commitment of resource?</td>
<td>No. Resource is already in place and no additional resource is expected.</td>
</tr>
<tr>
<td>Does it relate to an area where there are known inequalities?</td>
<td>No. This policy has no impact on the equality target groups. This policy is targeted at large private sector organisations not at individuals.</td>
</tr>
</tbody>
</table>

82. Based on the answers to the specific questions above we have decided that a full equality impact assessment is not required. At present there is no evidence to suggest that there are any adverse effects on any of the protected characteristics. The overall policy will be monitored to ensure action is taken if any unanticipated impact occurs but it is generally difficult to know what they would be for the different sectors involved in the scheme.

2. Small Firms Test

83. It is not envisaged that the options considered will have a significant impact on small business, primarily because the proposed changes will actually reduce the admin burden to businesses including those of small size. Furthermore, the CCA scheme is voluntary and small businesses do not have to participate in it. If they do they then get the CCL discount which outweighs any of the voluntary participatory costs.
Annex 3: Further Background to the CCA Scheme

Site Coverage: Replacement of the 90/10 rule with a 70/30

84. Current Climate Change Agreements provide that where the energy use of the energy intensive installation is equal to 90% or more of the total energy use of the site, the whole site is deemed to be an eligible facility. Where the total energy use is less than 90%, permanent sub-metering is required to measure all energy use within the eligible facility. The 90/10 calculation must be reviewed annually by the operator.

85. The 90/10 rule allows eligible facilities to avoid the need to meter separately a small fraction of their overall energy use. The current proposal is to lower the 90% threshold to 70% to extend the benefit of reduced administrative effort and cost of sub-metering to a larger number of businesses.

NOVEM

86. The application of Novem resolves the issue of establishing a common relative target for sectors or target units that have diverse products. The Novem procedure applies only where targets are relative.

87. Under current Climate Change Agreements, the “Novem” procedure has been used by certain sectors and target units for setting relative targets and measuring performance. The Novem procedure applies only where targets are relative and its application is optional.

88. To set relative targets a throughput measure is needed that relates accurately to energy consumption or carbon emissions. In sectors and target units that have single products this can readily be achieved, e.g. kWh/tonne bricks, GJ/litre of pure alcohol. However, in sectors and target units that have a range of products a single throughput unit can be totally unrepresentative. For example, a chemical company may manufacture paint by the litre and coated products by the square metre.

89. The Novem method was devised to resolve this problem. The basic principle is that the energy used for the actual production level in the target year is compared with the energy that would have been used for the same level of production and mix of products at the efficiency of production in the base year. The Novem Method corrects distortions in overall and individual Specific Energy Consumptions (SEC) introduced by changes in product mix/output, so that the aggregate result reflects only the improvement in individual SECs.

90. The application of Novem resolves the issue of establishing a common relative target for sectors or target units that have diverse products. If its application is obligatory, it results in a highly accurate assessment of the change in energy efficiency performance of the sector or target unit. However, allowing sectors or target units to decide whether or not to apply the original or lower Novem adjusted target results in an effective weakening of targets. The Government believes that there is a need to establish common targets for the sectors and target units concerned and that targets should remain challenging and effective.

91. Government has therefore decided to continue to apply Novem for relevant sectors and target units, but require that Novem be applied in all cases, irrespective of whether the result is advantageous or disadvantageous to the sector or target unit concerned.
Overlap with the EU ETS: Double Counting Rule

92. Some operators that have climate change agreements in place, under the current scheme, also fall under the Emissions Trading System. Climate Change Agreements cover direct (fossil fuel) and indirect (electricity) emissions and some process emissions. The EU ETS covers direct and process emissions. Approximately 360 operators are covered by both the EU ETS and climate change agreements in respect of the some of the same emissions. These emissions are known as the overlap emissions. An operator covered by a Climate Change Agreement and the EU ETS will be able to trade allowances on both the UK ETS and the EU ETS. The trading registries for each scheme are entirely separate and the allowances in each of the schemes are not fungible. Special rules are in place to ensure that an operator cannot trade in respect of the overlap emissions on both the UK ETS and the EU ETS.

93. If an operator reduces emissions within the overlap, it may generate surplus allowances under both the UK ETS and the EU ETS in respect of the same reduction. Conversely, if emissions increase, the operator may be required to purchase allowances under both schemes. The UK Greenhouse Gas Emissions Trading Scheme 2002 makes provision to prevent the operator being faced with double benefit or double jeopardy by way of the double counting mechanism. This is contained in Rule D3A which was added in 2007 following lengthy consultation with interested parties.

94. The rule operates to provide that where an operator has surplus EU ETS allowances, this is offset by the CCA target being tightened to become more demanding. This is an emissions reduction but is achieved by tightening the CCA target to make it more demanding. Alternatively, if operators do not want to use the double counting mechanism they can avoid it completely by retiring all their surplus EU ETS allowances that form the overlap. Any failure to retire all the surplus EU ETS allowances leads to the full implementation of the double counting mechanism, with no allowance being made for any part of the EU ETS surplus that might have been retired.

UK ETS

95. The UK Emissions Trading System (UK ETS) was the world's first economy-wide greenhouse gas emissions trading scheme. The UK ETS was created in 2002 for Direct Participants and for Climate Change Agreement operators. The Direct Participant element of the scheme ended in 2006, though participants who generated allowances have continued to be able to trade them with Climate Change Agreement operators.

96. The registry is an electronic, web-based system for holding and transferring greenhouse gas emission allowances. These allowances exist only in electronic form, each with a unique serial number. Anyone wanting to hold, buy or sell allowances in the UK Emissions Trading Scheme will need to have an account in the registry which will record the holdings of allowances by all Participants, tracking allowances from their initial allocation through all transfers of ownership right through to final cancellation or retirement.

97. Individual operators and Sector Associations may participate in emissions trading for the purposes of their CCA Umbrella (Sectors) and Underlying (Operators) agreements. These agreements are signed off by the Secretary of State and detail specific targets that each operator/Sector must meet at every Milestone (2 years). Whether an operator has met its target or not is assessed in accordance with rules laid down in the agreements and under the UK Greenhouse Gas Emissions Trading Scheme 2002.

98. Under a climate change agreement, an operator has the option of choosing the currency in which to express their targets. This may be an absolute or a relative target. Absolute targets set an absolute level of energy use or emissions during a target period whereas a relative
target sets, for example, a target based on energy use or emission per unit of throughput during a target period.

99. Where, at the end of a target period, an operator has met its target by reducing emissions below the target level, the difference between the emissions and the target (the overachievement) can be converted into emissions allowances which can be banked or sold via the UK Emissions Trading Registry. Where an operator is not able to meet its target, it can surrender any previously banked allowances or purchase and surrender allowances via the Registry to offset against its target in order to be certified for the purposes of the Levy.

100. Target Units register with DECC to obtain Trading Accounts. Trading Accounts are held by a trading participant or any other participant for the purposes of allocating, holding and transferring allowances. One allowance is equivalent to 1 tonne of CO₂ emissions. The price of an allowance varies according to the market. There are two main factors that determine the supply of allowances from Climate Change Agreements – energy efficiency measures and changes in throughput. Throughput changes can generate “windfall” allowances in two ways under the current scheme:

- for absolute targets when throughput falls - energy use falls, though not necessarily in direct proportion to the fall in throughput, depending on base load;
- for relative targets when throughput rises - base load is spread over more units of throughput, although this is limited by available capacity.

101. The current scheme recognises this potential for windfall allowances. In the case of relative targets there is a gateway to UK ETS which ensures that there is no net flow of allowances from the relative sector into the market. This is achieved by limiting sales of allowances to the extent that allowances have been purchased by target units with relative targets. In the case of absolute targets, the agreements provide that targets must be adjusted if throughput falls by more than 10% against that predicted.

102. Government proposes to end carbon trading by closing the UK ETR. This will remove the need for managing the registry and fall in throughput adjustments as described above which significantly reduces the admin burden of CCAs on both TUs and Sectors. The UK ETS is scheduled to close immediately after the end of the current audit programme.
Table A: Simplification savings £2009 prices (undiscounted)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All target units required to meet targets (Industry)</td>
<td>-165,408</td>
<td>-165,408</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reporting Periods (Industry)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline Years (Government)</td>
<td>1,594</td>
<td>1,594</td>
<td>1,594</td>
<td>1,594</td>
<td>1,594</td>
<td>1,594</td>
<td>1,594</td>
<td>1,594</td>
<td>1,594</td>
</tr>
<tr>
<td>Risk Management Tools and Buyout Mechanism (Government)</td>
<td>20,000</td>
<td>20,000</td>
<td>22,717</td>
<td>20,000</td>
<td>22,717</td>
<td>20,000</td>
<td>22,717</td>
<td>20,000</td>
<td>22,717</td>
</tr>
<tr>
<td>Risk Management Tools and Buyout Mechanism (Industry)</td>
<td>483,767</td>
<td>483,767</td>
<td>483,767</td>
<td>483,767</td>
<td>483,767</td>
<td>483,767</td>
<td>483,767</td>
<td>483,767</td>
<td>483,767</td>
</tr>
<tr>
<td>Overlap with EU ETS - Double Counting Mechanism (Government)</td>
<td>15,940</td>
<td>15,940</td>
<td>15,940</td>
<td>15,940</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overlap with EU ETS - Double Counting Mechanism (Industry)</td>
<td>65,626</td>
<td>65,626</td>
<td>65,626</td>
<td>65,626</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Removing Verification (Industry)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Option 2&quot; Type Agreements (Government)</td>
<td>1,594</td>
<td>1,594</td>
<td>1,594</td>
<td>1,594</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scheme Rules (Government)</td>
<td>2,717</td>
<td>2,717</td>
<td>2,717</td>
<td>2,717</td>
<td>2,717</td>
<td>2,717</td>
<td>2,717</td>
<td>2,717</td>
<td>2,717</td>
</tr>
<tr>
<td>Target &amp; Milestone Periods; Annual Reporting (Industry)</td>
<td>-50958</td>
<td>-50958</td>
<td>-50958</td>
<td>-50958</td>
<td>-50958</td>
<td>-50958</td>
<td>-50958</td>
<td>-50958</td>
<td>-50958</td>
</tr>
<tr>
<td>Site Coverage: 70/30 Rule (Government)</td>
<td>1,358</td>
<td>1,358</td>
<td>1,358</td>
<td>1,358</td>
<td>1,358</td>
<td>1,358</td>
<td>1,358</td>
<td>1,358</td>
<td>1,358</td>
</tr>
<tr>
<td>Site Coverage: 70/30 Rule (Industry)</td>
<td>15,520</td>
<td>776</td>
<td>16,296</td>
<td>1,552</td>
<td>17,072</td>
<td>2,328</td>
<td>2,328</td>
<td>2,328</td>
<td>2,328</td>
</tr>
<tr>
<td>Total</td>
<td>-145,408</td>
<td>41,189</td>
<td>604,778</td>
<td>41,965</td>
<td>792,596</td>
<td>42,741</td>
<td>958,780</td>
<td>27,997</td>
<td>958,780</td>
</tr>
</tbody>
</table>

Note: negative value reflects a cost
## Table A: Net Present Value (discounted) simplification savings £2009 prices

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All target units required to meet targets (Industry)</td>
<td>-159,814</td>
<td></td>
<td>-139,269</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-299,084</td>
</tr>
<tr>
<td>Reporting Periods (Industry)</td>
<td></td>
<td>53,799</td>
<td>50,222</td>
<td>46,882</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>194,668</td>
</tr>
<tr>
<td>Baseline Years (Government)</td>
<td>1,488</td>
<td>1,438</td>
<td>1,389</td>
<td>1,342</td>
<td>1,297</td>
<td>1,253</td>
<td>1,211</td>
<td>1,170</td>
<td></td>
<td>10,587</td>
</tr>
<tr>
<td>Risk Management Tools and Buyout Mechanism (Government)</td>
<td>19,324</td>
<td>18,670</td>
<td>20,489</td>
<td>17,429</td>
<td>19,127</td>
<td>16,270</td>
<td>17,855</td>
<td>15,188</td>
<td>16,668</td>
<td>161,021</td>
</tr>
<tr>
<td>Risk Management Tools and Buyout Mechanism (Industry)</td>
<td></td>
<td>436,330</td>
<td>407,319</td>
<td>380,236</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,578,840</td>
</tr>
<tr>
<td>Overlap with EU ETS-Double Counting Mechanism (Government)</td>
<td></td>
<td>14,377</td>
<td>13,421</td>
<td>12,529</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>52,022</td>
</tr>
<tr>
<td>Overlap with EU ETS-Double Counting Mechanism (Industry)</td>
<td></td>
<td>59,190</td>
<td>55,255</td>
<td>51,581</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>214,178</td>
</tr>
<tr>
<td>Removing Verification (Industry)</td>
<td></td>
<td></td>
<td>296,753</td>
<td>277,023</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>832,379</td>
</tr>
<tr>
<td>&quot;Option 2&quot; Type Agreements (Government)</td>
<td>1,438</td>
<td></td>
<td>1,342</td>
<td></td>
<td>1,253</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5,202</td>
</tr>
<tr>
<td>Scheme Rules (Government)</td>
<td>2,536</td>
<td>2,451</td>
<td>2,368</td>
<td>2,288</td>
<td>2,210</td>
<td>2,136</td>
<td>2,063</td>
<td></td>
<td>1,994</td>
<td>18,045</td>
</tr>
<tr>
<td>Target &amp; Milestone Periods: Annual Reporting (Industry)</td>
<td>-45,961</td>
<td></td>
<td>-42,905</td>
<td></td>
<td>-40,052</td>
<td></td>
<td></td>
<td>-37,389</td>
<td></td>
<td>-166,308</td>
</tr>
<tr>
<td>Site Coverage: 70/30 Rule (Government)</td>
<td>1,268</td>
<td>1,225</td>
<td>1,183</td>
<td>1,143</td>
<td>1,105</td>
<td>1,067</td>
<td>1,031</td>
<td>996</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Coverage: 70/30 Rule (Industry)</td>
<td>14,488</td>
<td>700</td>
<td>14,201</td>
<td>1,307</td>
<td>13,888</td>
<td>1,830</td>
<td>1,768</td>
<td></td>
<td>1,708</td>
<td>49,890</td>
</tr>
<tr>
<td>Total</td>
<td>-140,491</td>
<td>38,450</td>
<td>545,475</td>
<td>36,570</td>
<td>667,345</td>
<td>34,770</td>
<td>753,592</td>
<td>21,261</td>
<td>703,487</td>
<td>2,660,459</td>
</tr>
<tr>
<td>Of which</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>255,896</td>
</tr>
<tr>
<td>Industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,404,563</td>
</tr>
</tbody>
</table>

**Note:** negative value reflects a cost.